





# Marion County, KS Flood Risk Review Meeting

November 17, 2020

While we are waiting, please enter your favorite holiday tradition in the chat box!

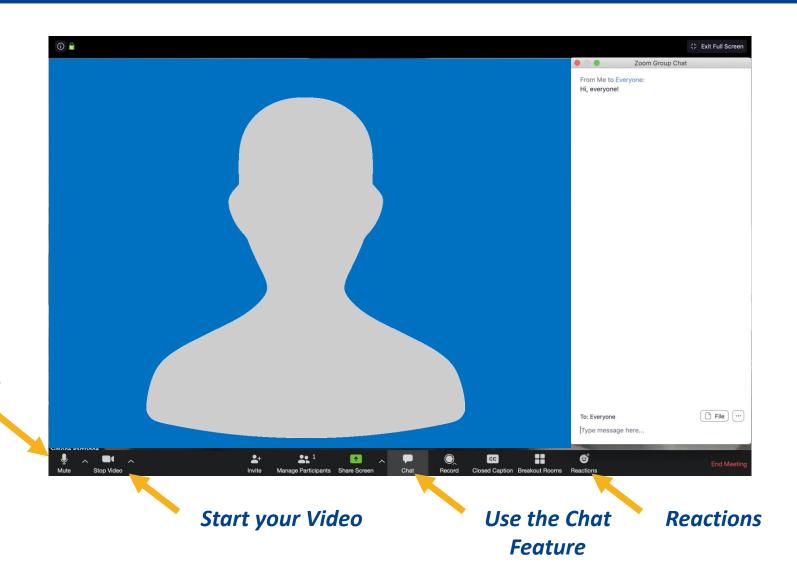
# THARKYOU

We appreciate the time you are giving to this work and we want to use it wisely.

Your feedback at this point in the project is very important.

# **Zoom Features**





Mute / Unmute



# Rules of the Road

- Attendees will be muted during the presentation to help eliminate background noise.
- Use the chat to ask questions during the presentation! We will pause for questions at various stopping points and have several poll questions.
- If you want to share your video, please do!
- For technical difficulties, send a private chat to Joanna Rohlf; or email <u>Joanna.Rohlf@ks.gov</u>
- We'll be recording this webinar for those who aren't able to attend today.

### Intros



### **Kansas Department of Agriculture**

Tara Lanzrath, CFM
Floodplain Mapping Coordinator

Joanna Rohlf, CFM
Floodplain Mapping Specialist

William Pace, CFM
Floodplain Mapping Specialist

**Steve Samuelson, CFM**State NFIP Coordinator

Cheyenne Sun Eagle NFIP Specialist

FEMA - Region VII

Andy Megrail - Regional Project Officer



Wood Environment & Infrastructure Solutions Inc.

Joe File, PE, CFM - Senior Associate / Program Manager

Maria Neeland PE, CFM – Project Manager



# Today's Goals



- Review how we developed your flood risk data
- Get your feedback on the flood risk data
- Review future steps

Main Takeaway: We want your feedback while your map is still in draft form and there is time to incorporate feedback

# First, a brief recap



Over the past 30 years, flooding has been more dangerous in the U.S. than any other weather-related problem. To minimize flood damage, we must first understand where the risk is.

# Why Have Floodplain Maps?



- Understand the risk so you can make informed planning decisions and avoid future flood damage in your community.
- Determine where flood insurance is needed and rate its cost.
  - Flood Insurance Rate Map (FIRM)
- Provide the basis for updating community floodplain management ordinances.
  - These ordinances are your tool for reducing your community's vulnerability to flood risk.

## FEMA Floodplain Mapping Program



- Risk Mapping Assessment and Planning (Risk MAP)
- Supports the National Flood Insurance Program (NFIP); performed on a watershed basis.
- Consists of both Regulatory and Non-Regulatory Products.
- Through Risk MAP, we provide updated floodplain maps, as well as other (free!) data and tools that can help you plan to reduce your community's risk.



### How Did We Get Here?



- Base Level Engineering (BLE) 2019
  - Gives us early insight into your flood risk
  - Kick off Meeting held on January 15, 2019
  - Discovery and Initial Map Review Meeting held on September 26, 2019
- Data Development 2020
  - Enhance the engineering analysis
  - Develop regulatory draft floodplain maps
  - Develop Flood Insurance Study
  - Develop flood risk data tools for your community

## Marion County- Mapping Update



### **Scoped Studies**

New Zone A- Excess Rainfall On Grid
New Zone A studies will be developed for these

streams using 2D "excess rainfall-on-grid" hydrology, and Hec-Ras 2D hydraulics.

### New Zone A - Gage Analysis

New Zone A studies will be developed for these streams using 2D "excess rainfall-on grid" hydrology calibrated to Gage Analysis Flows, and 2D Hec-Ras hydraulics.

#### New Enhanced Zone A - Rainfall Runoff

New Enhanced Zone A studies will be developed for these streams using 2D "excess rainfall-on-grid" hydrology calibrated to HEC-HMS Flows, and 2D Hec-Ras hydraulics. Field measured structure data will be incorporated into the modeling.

### New Zone AE With Floodway- Rainfall

New Zone AE with Floodway studies will be developed for these streams using Rainfall Runoff hydrology. Survey data will be collected. Either 1D or 2D HEC-RAS modeling will be used for hydraulics. A floodway will be developed.

### New Zone AE -Existing Study

New studies developed during levee certification efforts exist for these streams through projects that were funded separately. Those floodplains will be iincorporated into this mapping.

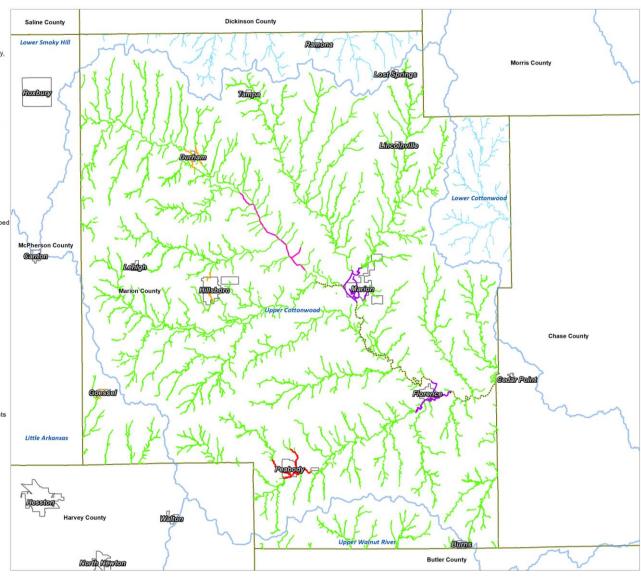
### New Static Zone AE

New Static Zone AE studies will be developed for these streams using a statistical frequency analysis.

### New Zone A- Incorporation of Lower Cottonwood Watershed and Lower Smoky Hill Watershed Studies

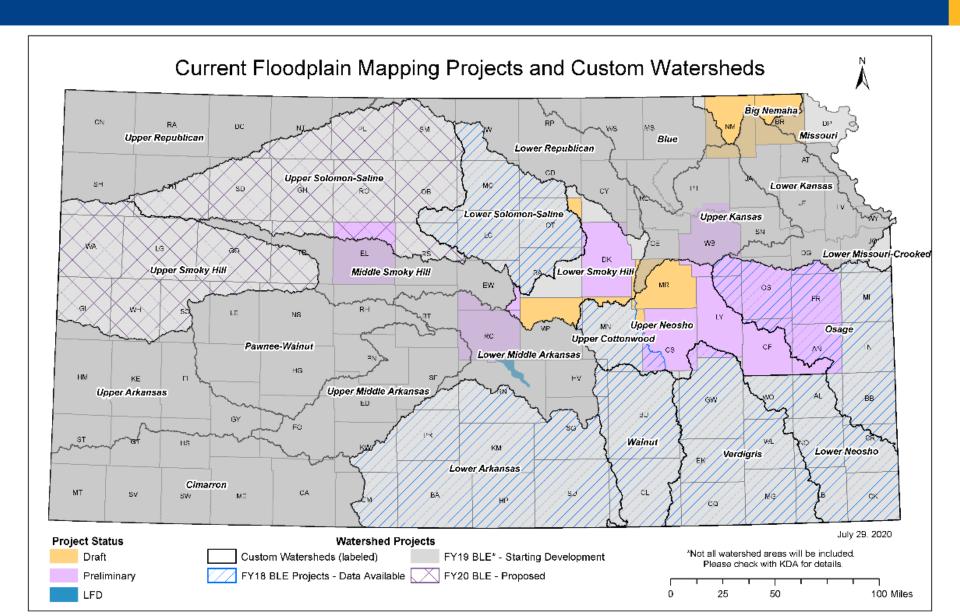
New Zone A studies from the Lower Cottonwood Watershed and Lower Smoky Hill Watershed projects will be incorporated into the new mapping.





### We Do This Work Across Kansas





# **Definitions**





**Hydrology** *How Much Water?* 



Hydraulics
How High Will Water Get?



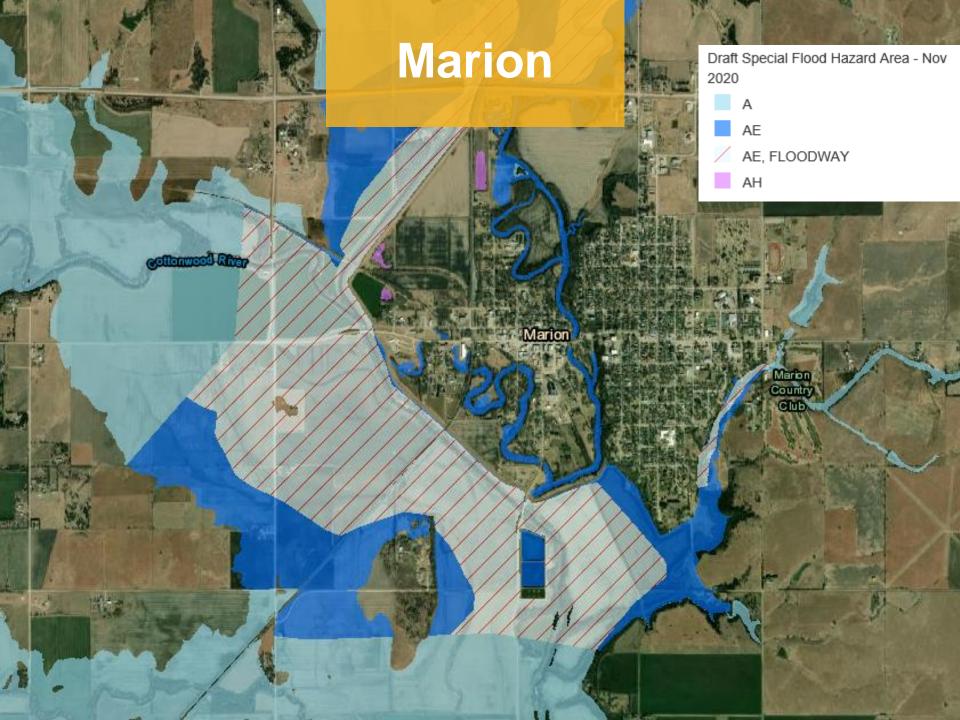
# Data Gathered

- Information gathered during the BLE Phase of the project was incorporated and/or used for validation of modeling
- Survey and as-built plan information was gathered for bridge and culvert openings



# Marion Levee System

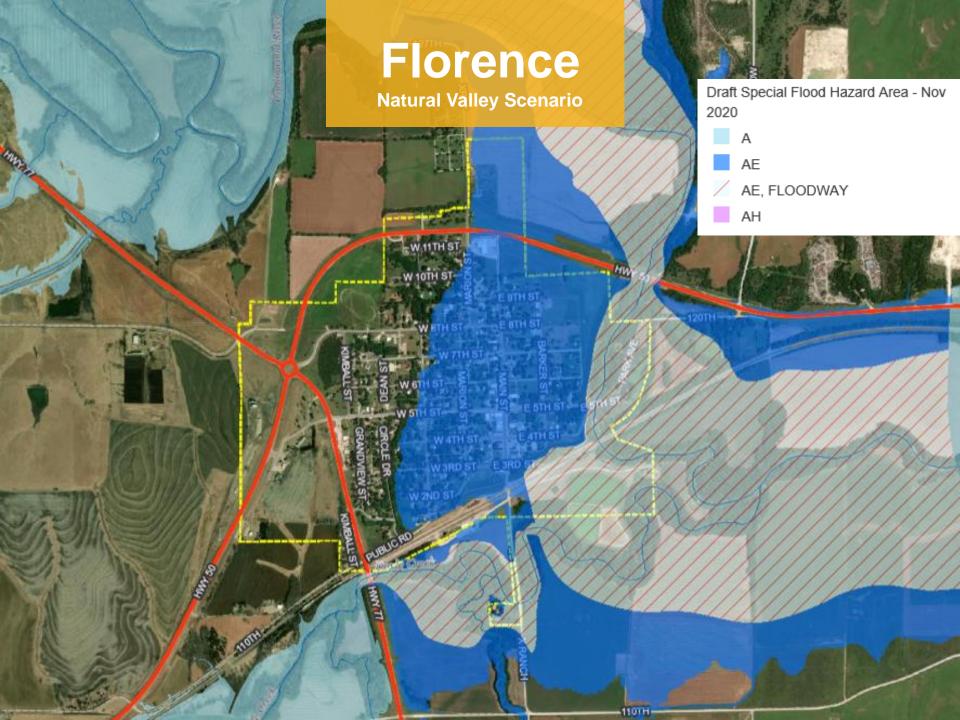
- Recent Study for Marion Levee System was previously completed
  - Effective date of the PMR was July 19, 2018
- The new studies completed for the July 20, 2018 mapping update for the City of Marion were not changed as a result of this mapping update.

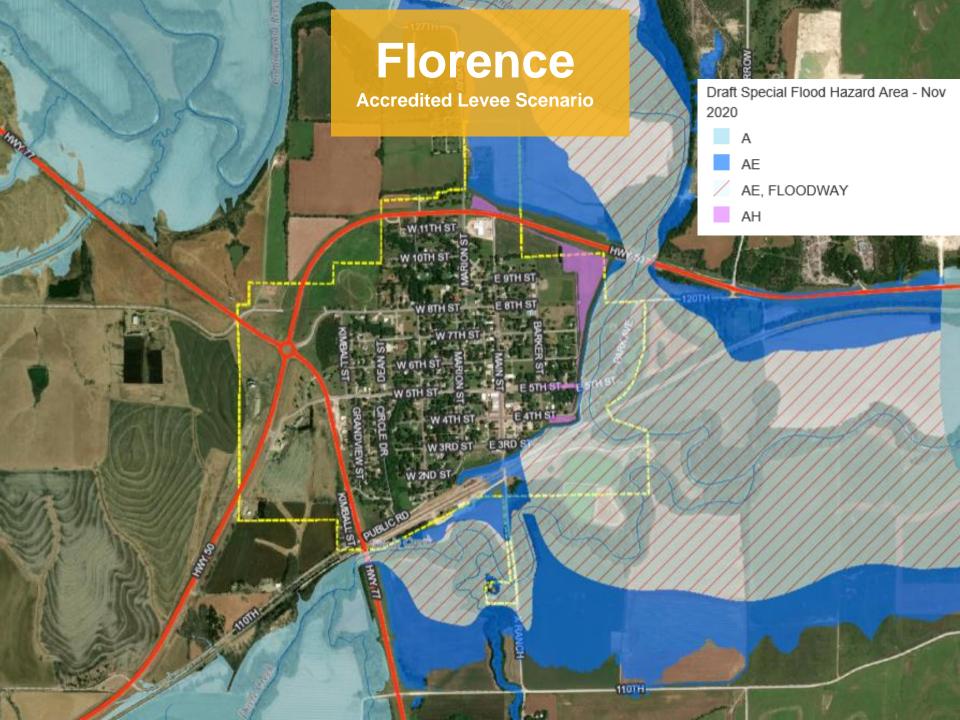




# Florence Levee System

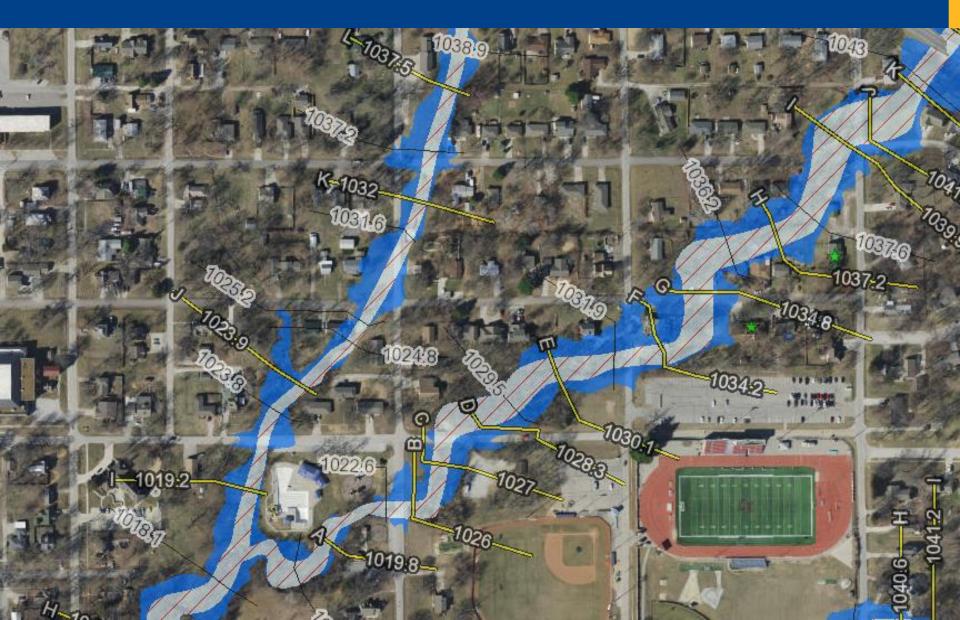
- A Levee Certification Project for the Florence Levee System is nearing completion.
- Interior ponding areas from the Florence Study have been incorporated into the draft floodplain maps as Zone AH areas.
- Submittal to FEMA is anticipated for the end of 2020.
  - Indications are that the levee system meets the 44 CFR 65.10 FEMA requirements





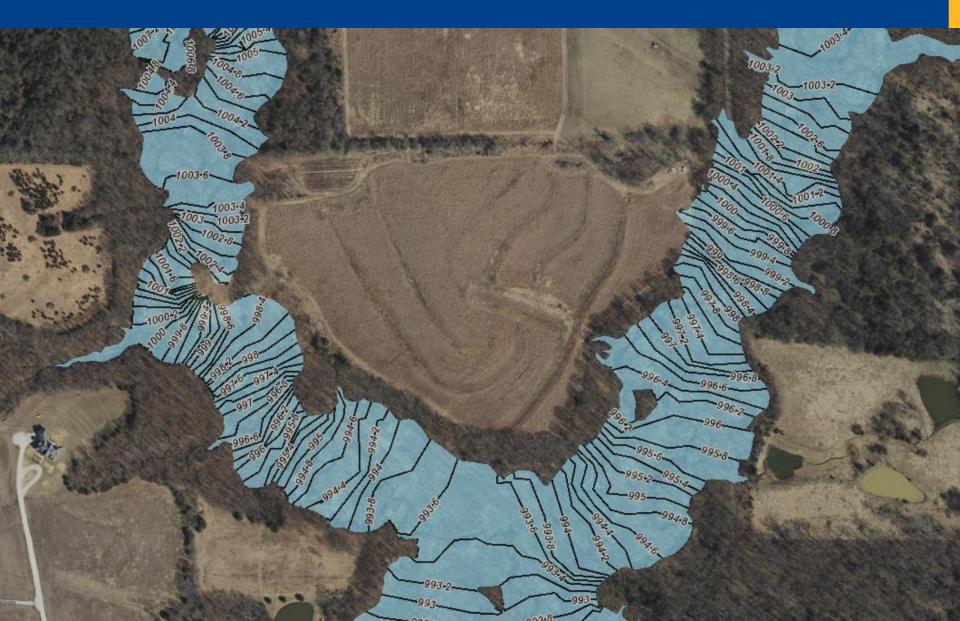
# Example of Zone AE with Floodway





# Example of Zone A

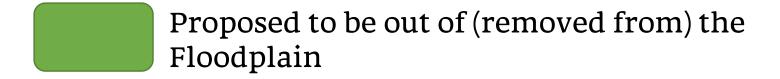




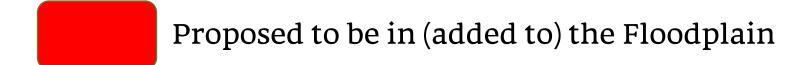
## Changes Since Last FIRM

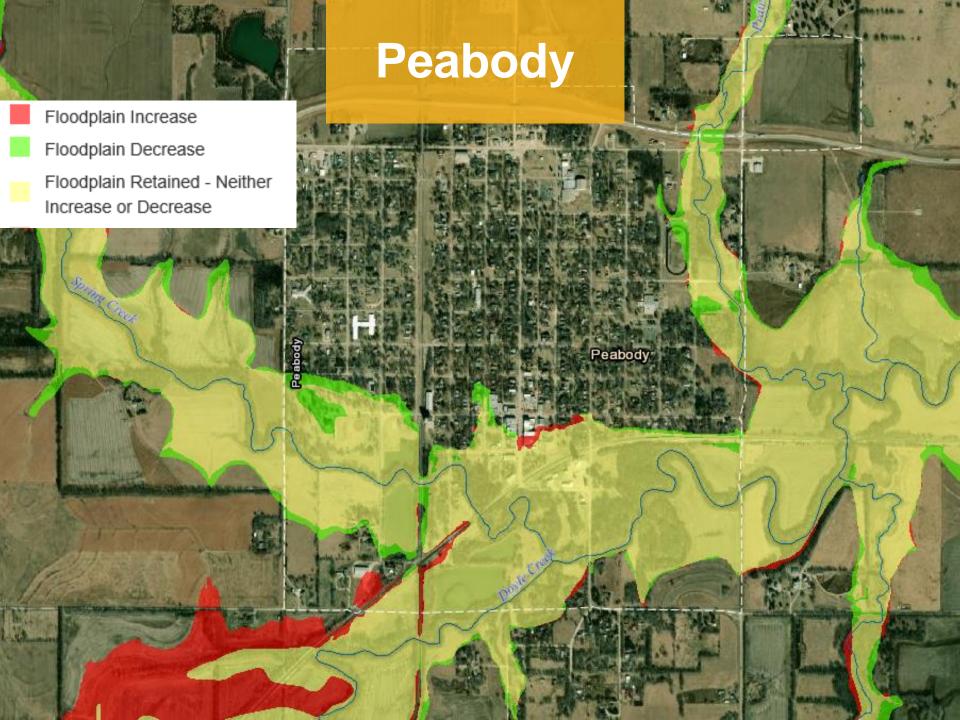


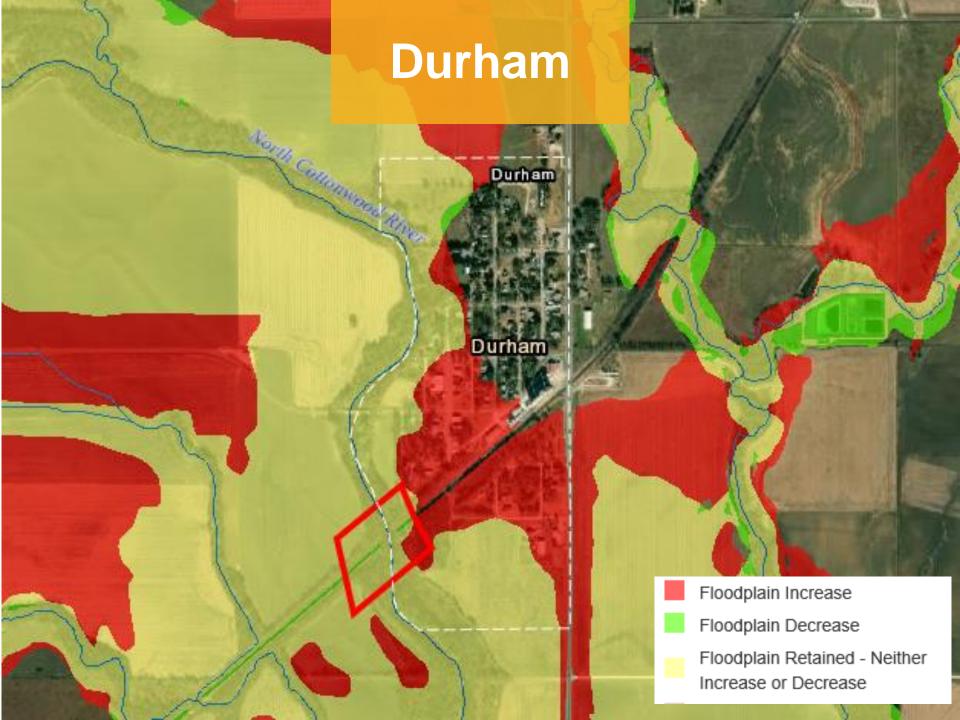
# Compares the Draft Floodplains to the Current Effective Floodplains

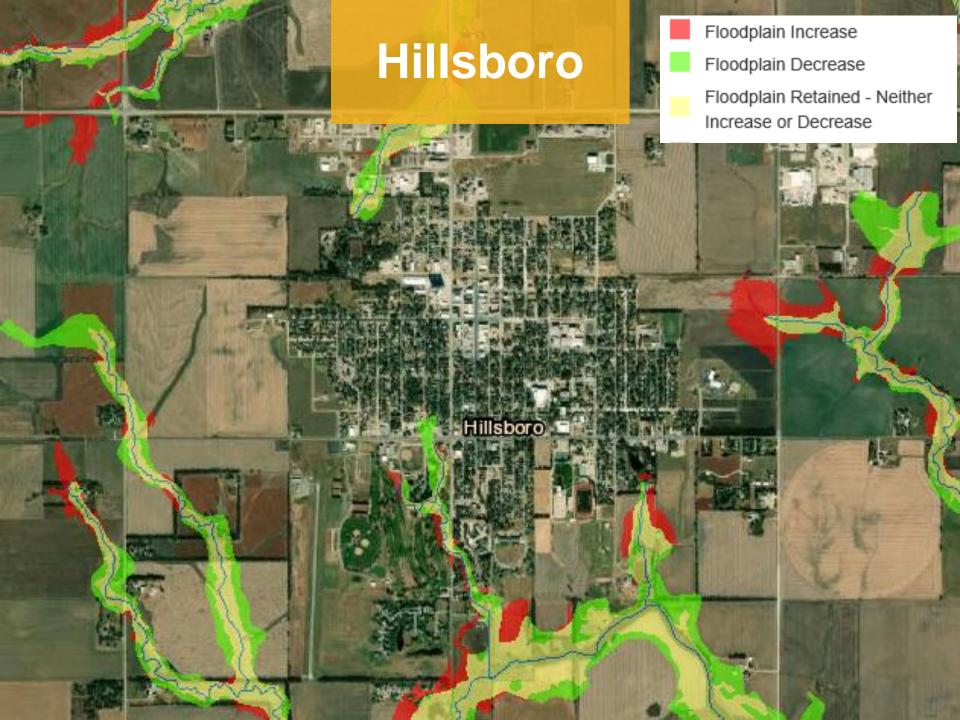


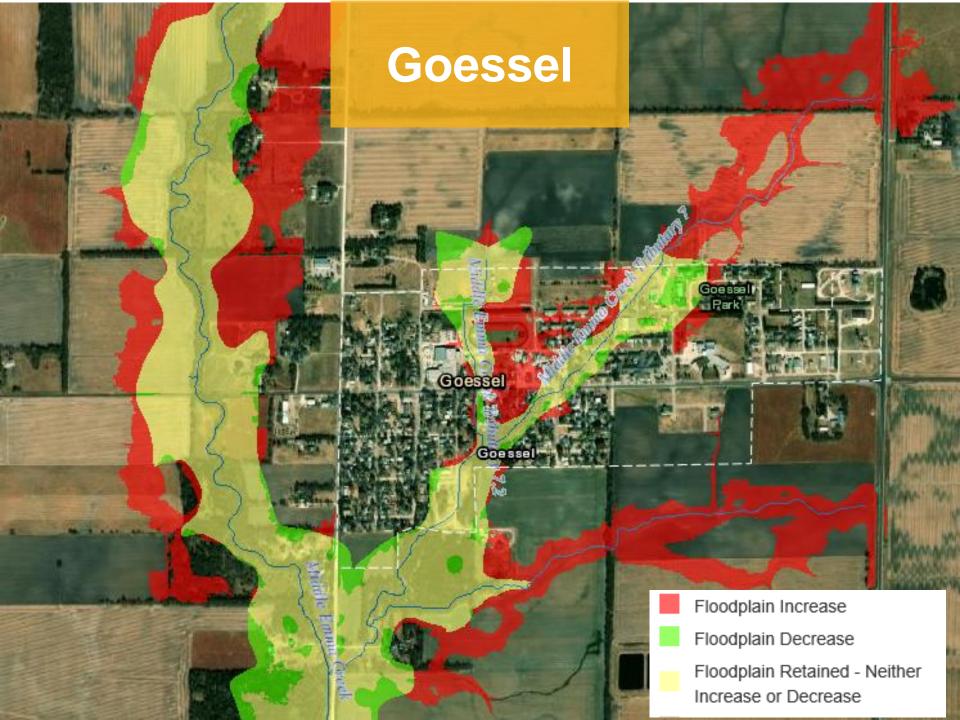












Reconnaissance Surveying

GIS Base Map Coordination

Effective Study Redelineation

Leverage Studies

New Studies

**DFIRM Production** 

Post-Processing

Map Adoption

### **Project Tasks**

- Discovery
- Base Map Preparation
- Survey and Topography
- New Studies
- DFIRM and FIS Production
- 6. Post-Preliminary

Finishing this phase: data development

### Your Maps Undergo Significant Review



- Wood E&IS Review
  - Engineering reviewed by separate Wood E&IS office
- Independent Technical Review (ITR)
  - Third party review of engineering
  - AECOM
- KDA Review
  - Visual review
  - Eye test
  - Identify impact of the map
- FEMA Review
  - Formal quality review process of regulatory products
- Your Review!
  - Community Review
  - Public Review

**Community Map Review** 

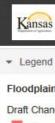


# Your Map Review



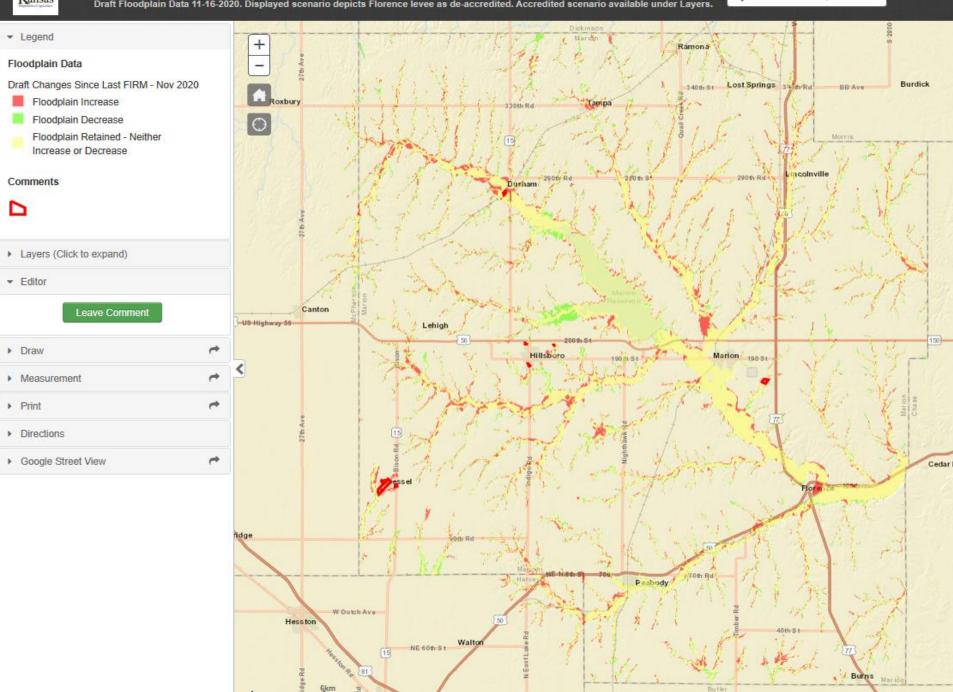
### This is your opportunity to have impact!

- We want to agree on what your map looks like before Preliminary Status
  - That's when we enter the regulatory map-making phase, and it's harder to change things
- A web map has been provided for review
  - https://gis2.kda.ks.gov/gis/upper-cottonwood/
- This is where YOU look out for YOU: please provide your comments by December 17, 2020



Marion County Floodplain Mapping as part of the Upper Cottonwood Watershed project
Draft Floodplain Data 11-16-2020. Displayed scenario depicts Florence levee as de-accredited. Accredited scenario available under Layers.

Q Enter an address or place



## **Your Map Review**





Recent construction (e.g., a new building development that incorporated fill or changes to roadways, bridges, or culverts)



High Water Marks showing past flooding impacts



Floodplain boundaries that align with your experience of large-scale flooding



Model stream extents (where streams begin and end)



Political boundaries, especially if there is a recent annexation







# IMPORTANT STEP: All community comments will be addressed/reviewed before doing a public review

# Your Residents Also Have the Opportunity to Review the Draft Data



- Can review and comment online, using same Review Web Map
- Will run for at least 30 days
- We will also hold an Open House
  - Typically consists of computer stations where public can discuss draft floodplains with KDA, engineers, mapping experts, and insurance specialists
  - Will adjust to virtual Open House, if needed
- We'll need your help notifying your residents and finding location
- Tentatively scheduled for May 2021, following Florence Levee Accreditation by FEMA







# Open Discussion

# Unmute your phones and let's talk about this.

### **Our questions:**

- Do you think in-person or virtual Open House options would work for your community?
- Could you help promote an Open House?
- If so, how would you do that?
   Social media? Newsletters?
   Website posting? Direct mail?

What are your questions? We know you have some...

# **Next Steps**



Floodplain Man

## Timeline Review



- Your Review
  - Please get comments in by
     December 17, 2020
- Public Open House
  - Estimated: May 2021
- Preliminary Map Distribution
  - Estimated: December 2021
- Preliminary DFIRM Community
   Coordination Meeting
  - Estimated: January 2022
- Appeal Period
  - Estimated: March-June 2022
- Letter of Final Determination
  - Estimated: October 2022
- Effective Maps
  - Estimated: April 2023

Where we still have flexibility to change the data

Where you have to follow a more formal process (with higher effort) to request any changes to the data

# **Your Next Steps**

Review your community's maps and comment on areas of concern AND/OR areas that look right.

There are a few ways to do this:







### Lead the public outreach for your community

We can help you target who most needs to know; but will need your help to lead the outreach effort

Let us know if you need help or have any remaining questions!



# **Key Take-aways**

Floodplain Mapping Projects take time

Your involvement in this process will result in better flood information for your community

Get it right before Preliminary!

DON'T HESITATE TO CALL, WE ARE HERE TO HELP

# Where to go for...



# Online Project Information



### Project Website

- https://www.agriculture.ks.gov/divisionsprograms/dwr/floodplain/mapping/mappingprojects/lists/mapping-projects/upper-cottonwood
- Scoping Maps, Project Timeline, Meeting Presentations, Newsletters, Technical Reports, Web Review Map

### Web Review Map

- http://gis2.kda.ks.gov/gis/upper-cottonwood/
- Draft Floodplain Review

### Story Maps

- Project Info
- "Floodplain Current": Mapping Process 'Nuts and Bolts'

## Base Flood Elevation Portal



Kansas	Kansas	Base	Flood	Elevation	Portal
Department of Agriculture					
Home	About	Help			
Portal Registi	ation				
ortal Hogisti	4.000				
First Name					
Last Name					
User name					
Title					
Phone					
Email Address					
Address					
City					
Zip					
State K	ansas	-			
		Re	egister		

For Zone A floodplains, you can request BFE Data. Keep in mind that the data is still subject to change.

### **Contact Information**



### **KDA**

### Tara Lanzrath, CFM

Tara.Lanzrath@ks.gov

D: 785-296-2513

M: 785-276-9359

Floodplain Mapping Coordinator

### Joanna Rohlf, CFM

Joanna.Rohlf@ks.gov

D: 785-296-7769

Floodplain Mapping Specialist

### William Pace, CFM

William.Pace@ks.gov

D: 785-296-5440

Floodplain Mapping Specialist

### **Steve Samuelson, CFM**

Steve.Samuelson@ks.gov

D: 785-296-4622

M: 785-221-3809

State NFIP Coordinator

### **Cheyenne Sun Eagle**

Cheyenne.suneagle@ks.gov

D: 785-296-0854

**NFIP Specialist** 

### **Contact Information**



### Wood

Joe File, PE, CFM

joe.file@woodplc.com

O: 785-272-6830

M: 785-554-9108

Senior Associate / Program

Manager

### Maria Neeland, PE, CFM

maria.neeland@woodplc.com

D: 785-414-3127

M: 785-410-7499

**Project Manager** 

### **FEMA**

Andy Megrail, FAC-P/PM

Andy.Megrail@fema.dhs.gov

O: 816-283-7982

M: 816-807-3014

Regional Project Officer







## And now...

We are going to show you how to make comments and review your community's map

Any questions first?